10/822,352

VMTR/03DV

In the Claims

- 1. (Amended) An A carriage assembly comprising:
- (A) <u>a piezoelectric actuator</u> elongate columns each having a first end and a second end;
- (B) a movable element coupled to the first end of the piezoelectric actuator a translating section disposed between the elongate columns generally equidistant between the first and second ends and interconnected to the elongate columns;
- (C) a frame coupled to the second end of the first piezoelectric actuator and to said movable element; and
- (D) a translating section coupled to said movable element a flexure interconnecting cach elongate column to the translating section.
- 2. (Amended) The assembly of claim 1, wherein the <u>movable element comprises a second</u>

 <u>piezoelectric actuator, and said elongate columns piezoelectric actuators</u> are essentially parallel to one another.
- 3. (Amended) The assembly of claim 1, wherein motion of said piezoelectric actuator imparts motion of said movable element and said translating section relative to said frame further comprising a carriage that moves in the X-Y coordinate plane and reduces movement of the translating section in the Z direction.

10/822,352

VMTR/03DV

- 4. (Original) The assembly of claim 3, wherein the Z direction is perpendicular to the X-Y coordinate plane.
- 5. (Original) The assembly of claim 3, wherein the carriage is substantially symmetrical.
- 6. (Amended) The assembly of claim 1, further comprising wherein said frame is a rigid frame that supports the carriage.
- 7. (Amended) The assembly of claim 1, wherein said movable element and said piezoelectric actuator are in the form of elongate columns, and further comprising:
- (1) upper cross members configured to connect the first ends of the elongate columns; and
- (2) lower cross members configured to connect the second ends of the elongate columns.
- 8. (Amended) The assembly of claim 1, wherein the said movable element and said piezoelectric actuator are in the form of elongate columns, and further comprising flexures interconnecting each elongate column to the translating section, wherein each said flexure further comprises:
- (1) a first web formed by a first pair of opposed slots which are formed transversely and extend toward one another in each of the elongate columns;

10/822,352 VMTR/03DV

(2) a second web formed by a second pair of opposed slots which are formed transversely in each elongate column and extend toward the first pair of opposed slots in the same elongate column; and wherein the first web and the second web are arranged perpendicular to one another and spaced apart along the same elongate column.

9. (Amended) The assembly of claim 1, further comprising wherein:

- (1) a first piezoelectric the assembly of claim 1 is connected to the translating section, wherein the first piezoelectric assembly and moves the translating section along a first linear path; and further comprising
- (2) a second piczoelectric piczoelectrically-driven assembly connected to the translating section, wherein the second piczoelectric assembly moves the translating section creates motion along a second linear path.
- 10. (Original) The assembly of claim 9, wherein each piezoelectric assembly further comprises:
- (1) a central coupler having a rigid section connected to a portion of the translating section:
 - (2) at least one flexure connected to the rigid section; and
- (3) first and second piezoelectric elements, wherein the first piezoelectric element extends from each flexure toward the first end of the elongate column and the second piezoelectric element extends from each flexure toward the second end of the elongate column.

10/822,352

VMTR/03DV

- 11. (Original) The assembly of claim 10, wherein each flexure interconnects each first and second piezoelectric element with the rigid section.
- 12. (Amended) The assembly of claim 1, wherein said movable element and said piezoelectric actuator are in the form of elongate columns, and further comprising a plurality of stiffening beams connected to the elongate columns.
- 13. (Original) The assembly of claim 6, wherein the rigid frame is stainless steel.

Claims 14-29 will be canceled.